

CLAIMS

1. (Currently Amended) A system for ranking items in a selectable information list received from an information delivery system, comprising:

a database system that logs selections of information viewed by local users of the information delivery system and tags each of the logged selections of information with a corresponding time subinterval from a plurality of time subintervals that relates to a respective viewing of the selected information;

a filtering component that forms a temporally filtered reviewed items list that includes a subset of the logged selections of information viewed by the local users, the subset chosen to incorporate the logged selections tagged with a particular one of the plurality of time subintervals that includes a target time period for providing a recommendation, the temporally filtered reviewed items list provides implicit evidence of content preferences associated with a likely subset of the local users that employs the information delivery system during the particular one of the plurality of time subintervals;

a collaborative filtering system that infers the content preferences associated with the likely subset of the local users by utilizing the subset of the logged selections included in the temporally filtered reviewed items list as an input, and generates the recommendation specific to the inferred, likely subset of the local users based at least in part on the inferred content preferences and information obtained from a plurality of global users related to the particular one of the plurality of time subintervals, wherein the filtering component comprises a popularity filter that selects a recommendation based, at least in part, by multiplying a collaborative filter score of a

recommendation by the probability that the user does not know of the recommendation;
and

a user interface that displays the recommendation.

2. (Previously presented) The system of claim 1, a selection is logged if the selection is viewed for a dwell time that exceeds a predetermined threshold.

3. (Previously presented) The system of claim 2, the collaborative filtering system assigns a positive vote to logged selections that are viewed for a dwell time that exceeds a predetermined threshold.

4. (Previously presented) The system of claim 1, a selection is logged if the selection is briefly viewed and jumped away to another selection.

5. (Previously presented) The system of claim 4, the collaborative filtering system assigns a negative vote to logged selections that are viewed briefly and jumped away to another selection.

6. (Previously presented) The system of claim 1, the viewed information is time stamped by event type and the collaborative filtering system is based on a single collaborative filtering model that is trained according to time subintervals that the information has been viewed.

7. (Previously presented) The system of claim 1, the collaborative filtering system is based on a plurality of separate collaborative filtering models, each collaborative filtering model is trained with the information from a particular time subinterval of temporal history that has been viewed.

8. (Canceled).

9. (Previously presented) The system of claim 1, the collaborative filtering system provides in real-time a selectable recommendation list ordered by estimated degree of preference that a user has for each item.

10. (Previously presented) The system of claim 9, the collaborative filtering system receives attributes of at least one user of the system and utilizes these attributes in providing the selectable recommendation list.

11. (Previously presented) The system of claim 10, the collaborative filtering system receives attributes of other systems and utilizes these attributes in providing a globally ranked recommendation list to a cluster of systems based on the temporal viewing history of the systems of the cluster.

12. (Previously Presented) The system of claim 9, the collaborative filtering system receives the temporally filtered reviewed items list that has been further filtered by the filtering component and generates a new recommendation according to the

preferences provided by the further filtered reviewed items list.

13. (Currently Amended) The system of claim 12, the filtering component comprising at least one of a live show selection filter, ~~a popularity filter~~, a pattern search engine or an adding items of interest and update component.

14. (Previously Presented) The system of claim 1, further comprising a user interface that allows a user to selectively filter the temporally filtered reviewed items list used as the input for the collaborative filtering system.

15. (Previously Presented) The system of claim 14, the user interface allows a user to request a time period for reviewing information from a selectable recommendation list wherein the collaborative filtering system supplies the selections for the time period requested based on the tags associated with the selections within a similar time interval covering the time period.

16. (Previously Presented) The system of claim 14, the user interface receives the temporally filtered reviewed items list, allows a user to modify the temporally filtered reviewed items list, and inputs the modified reviewed items list as updated preferences into the collaborative filtering system, such that a new recommendation list can be generated based on the updated preferences.

17. (Original) The system of claim 1, the information being multimedia.

18. (Withdrawn) A multimedia system that provides a recommendation to a set top box for utilization by an electronic program guide, comprising;

a database system that logs selections of programs viewed by users of a set top box and users of disparate set top boxes, and logs temporal history that includes a plurality of time subintervals that correspond to the viewing of the selected programs; and

a collaborative filtering system that employs the logged temporal history from the database system to infer content preferences associated with a likely subset of the users that employs the set top box during a particular one of the plurality of time subintervals, which includes a target time period for providing a recommendation, produce a user specific recommendation pertaining to the inferred, likely subset of the users of the set top box based at least in part on the inferred content preferences and information associated with the users of the disparate set top boxes related to a particular one of the plurality of time subintervals, and transmit the user specific recommendation to the set top box for display;

the collaborative filtering system infers content preferences and produces the user specific recommendation by employing a global inference system that groups set top boxes into clusters and generates a set of recommendations for members of at least one cluster based on the temporal viewing habits of members of the cluster and a cluster specific inference system that determines user preferences based on correlations between users of a given cluster.

19-31. (Canceled).

32. (Withdrawn) The system of claim 18, the multimedia system residing on a remote server coupled to the set top box and the disparate set top boxes wherein recommendations are generated by the server and transmitted to the set top box and the disparate set top boxes.

33. (Withdrawn) The system of claim 32, the set top box having an electronic program guide system that receives and displays the recommendations to a user.

34-52. (Canceled).

53. (Currently Amended) A system for ranking items in a selectable information list received from an information delivery system, comprising:

means for logging selections of information viewed by local users of the information delivery system and temporal history related to time segments within a day that correspond to the viewing of the selected information, the selections of information logged for a plurality of days;

means for training a plurality of separate collaborative filtering models, each with information from a corresponding, respective time segment within a day that has been viewed by the local users and disparate logged temporal history that has been viewed by a plurality of global users;

means for inferring content preferences associated with a likely subset of

the local users that employs the information delivery system during a particular time segment within a day utilizing a respective one of the collaborative filtering models corresponding to a target time period to provide a recommendation;

means for generating the recommendation specific to the inferred, likely subset of the local users based at least in part on the inferred content preferences and information obtained from a plurality of global users related to the particular time segment within a day, wherein generating the recommendation further comprises a popularity filter that selects a recommendation based, at least in part, by multiplying a collaborative filter score of a recommendation by the probability that the user does not know of the recommendation;

means for automatically broadening to include at least one additional time segment within a day when the recommendation yielded from the particular time segment within a day covering the target time period is inadequate; and

means for displaying the recommendation.